

TFW

TRANSMITTAL LETTER
(General - Patent Pending)

Docket No.
2003US312

Re Application Of: M. Dalil RAHMAN

Serial No.

10/734,022

Filing Date

December 11, 2003

Examiner

THORNTON, Yvette C.

Group Art Unit

1752

Title: **PHOTORESIST COMPOSITION FOR DEEP UV AND PROCESS THEREOF**

TO THE COMMISSIONER OF PATENTS AND TRADEMARKS:

Transmitted herewith is:

Information Disclosure Statement - 6 Pages

Information Disclosure Citation - 2 Pages

EP 1 215 193 B1 - 14 Pages

Nakano et al. - 10 Pages

Wallow et al. - 10 Pages

Jung et al. - 15 Pages

Nozaki et al. - 14 Pages

Nozaki et al. - 6 Pages

Tran et al. - 11 Pages

in the above identified application.

☐ No additional fee is required.

☐ A check in the amount of _____ is attached.

☒ The Commissioner is hereby authorized to charge and credit Deposit Account No. **50-3309**
as described below. A duplicate copy of this sheet is enclosed.

☐ Charge the amount of **\$180.00**

☐ Credit any overpayment.

☒ Charge any additional fee required.

Signature

Dated: August 18, 2005

SANGYA JAIN (Reg. No. 38,5504)
AZ ELECTRONIC MATERIALS USA CORP.
70 MEISTER AVENUE
SOMERVILLE, NJ 08876

Customer No. 26,289

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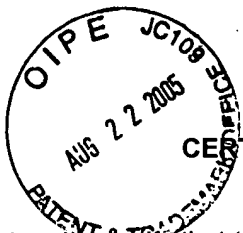
Signature of Person Mailing Correspondence

MARIA T. SANCHEZ

Typed or Printed Name of Person Mailing Correspondence

CC:

CERTIFICATE OF MAILING BY FIRST CLASS MAIL (37 CFR 1.8)			Docket No. 2003US312
Applicant(s): M. Dalil RAHMAN			
Serial No. 10/734,022	Filing Date December 11, 2003	Examiner THORNTON, Yvette C.	Group Art Unit 1752
Invention: PHOTORESIST COMPOSITION FOR DEEP UV AND PROCESS THEREOF			
<div data-bbox="121 346 365 598"></div> <p>I hereby certify that this <u>Transmittal Letter - 1 Page (1 Original and 1 Copy)</u> <i>(Identify type of correspondence)</i></p> <p>is being deposited with the United States Postal Service as first class mail in an envelope addressed to: The Commissioner of Patents and Trademarks, Washington, D.C. 20231-0001 on <u>August 18, 2005</u> <i>(Date)</i></p> <p><u>MARIA T. SANCHEZ</u> <i>(Typed or Printed Name of Person Mailing Correspondence)</i></p> <p><u></u> <i>(Signature of Person Mailing Correspondence)</i></p> <p>Note: Each paper must have its own certificate of mailing.</p>			



PATENT APPLICATION

CERTIFICATE OF MAILING/FACSIMILE TRANSMISSION (37 CFR 1.8)

I hereby certify that this paper (along with any paper referred to as being transmitted therewith) is (**XXX**) being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box. 1450, Alexandria, Virginia 22313-1450 or () being transmitted by facsimile to the U.S. Patent and Trademark Office. (Fax No. 703 872 9306) (_____ pages). This facsimile is being sent from (908) 429-3650.

Maria T. Sanchez
(Print Name)

Date: August 18, 2005

Maria T. Sanchez
(Signature)

Docket No. 2003US312

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

M. Dalil RAHMAN

Art Unit: 1752

Serial No. 10/734,022, filed December 11, 2003

Examiner: THORNTON, Yvette C.

For: PHOTORESIST COMPOSITION FOR DEEP UV AND PROCESS THEREOF

**INFORMATION DISCLOSURE STATEMENT AFTER THE FIRST OFFICE ACTION ON
THE MERITS, BUT BEFORE A FINAL OFFICE ACTION OR A NOTICE OF**

08/23/2005 AKELECH1 00000028 503309 10734022

ALLOWANCE (37 CFR 1.97 (c))

01 FC:1806

180.00 DA

August 18, 2005

Mail Stop AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

In accordance with the duty of disclosure provisions of 37 CFR §1.56, there is hereby provided certain information which the Examiner may consider material to the examination of the subject U.S. patent application. It is requested that the Examiner make this information of record if it is deemed material to the examination of the subject application.

1. Enclosures accompanying this Information Disclosure Statement are:
 - 1a. ☒ Form PTO-1449.
 - 1b. ☒ Copies of Information Disclosure Statement citations with the exception that copies of US Patents and US Patent Application Publications are not enclosed as the present application was filed after June 30, 2003 and the Patent Office has waived the requirement to enclose such documents under 37 C.F.R. § 1.98(a)(2)(i) pursuant to the Official Gazette announcement dated 05 August 2003. (If box not checked, see item 8a. below).
 - 1c. ☐ An English language copy of search report(s) from a counterpart foreign application or a PCT International Search Report - attached as annex to PCT/ISA/206 (If box checked, see item 8a. below).
 - 1d. ☐ English language abstract (complete or relevant portion(s)) or English language equivalent attached to each non-English language publication (see item 9c or 9e).
 - 1e. ☐ Explanations of Relevancy of References (ATTACHMENT 1(d), hereto) for providing a concise explanation of each non-English publication.

Legible copies of all items listed accompany this information statement except as noted herein:

US 4,491,628
US 5,350,660
US 5,843,624
US 6,477,980
US 6,274,286
EP 1 215 193 B1

Nakano et al., "Adhesion Characteristics of Alicyclic Polymers for use in ArF Excimer Laser Lithography", SPIE Vol. 3333, pp. 43 – pp. 52 (1998).

Wallow et al., "Reactive ion etching of 193 nm resist candidates: current platforms, future requirements", SPIE Vol. 3333, pp. 92 – pp. 101 (1998).

Jung et al., "Design of cycloolefin-maleic anhydride resist for ArF lithography", SPIE Vol. 3333, pp. 11 – pp. 25 (1998).

Nozaki et al., "A novel polymer for 913-nm resist", Journal of Photopolymer Science and Technology, Vol. 9, No. 3, pp. 509 – pp. 522 (1996).

Nozaki et al., "Evaluation of Alicyclic Methacrylate Resist with a γ -Butyrolactone Protective Group for 193-nm Lithography", Journal of Photopolymer Science and Technology, Vol. 11, No. 3, pp. 493 – pp. 498 (1998).

Hoang V. Tran et al., "Metal-Catalyzed Vinyl Addition Polymers for 157 nm Resist Applications. 2. Fluorinated Norbornenes: Synthesis, Polymerization, and Initial Imaging Results", Macromolecules Vo. 35, No. 17, pp. 6539 – pp. 6549 (2002).

2. ☐ This Information Disclosure Statement is filed under 37 CFR §1.97(b) before the latter of three months after the U.S. patent application filing date or the first Office Action on the merits. Accordingly, no fee or §1.97(e) Statement is required.

3. ☒ This Information Disclosure Statement is filed under 37 CFR §1.97(c) after the first Office Action on the merits, but before a Final Office Action or a Notice of Allowance.

3a. ☐ The §1.97(e) Statement in Item 5 below is applicable. Accordingly, no fee is required.

3b. ☒ The \$180.00 fee set forth in 37 CFR §1.17(p) in accordance with 37 CFR §1.97(c) is to be charged to Deposit Account No. 50-3309.

4. ☐ This Information Disclosure Statement is filed under 37 CFR §1.97(d) after the Final Office Action or the Notice of Allowance, but before payment of the Issue Fee.

☐ The §1.97(e) Statement (Item 5 below) is applicable.

A Petition to the Commissioner is hereby made under 37 CFR §1.97(d) to request consideration of this Information Disclosure Statement. The \$180.00 fee set forth in 37 CFR §1.17(i) is to be charged to Deposit Account No. 50-3309.

5. ☐ Statement Under §1.97(e) (*applicable if Item 3a or Item 4 is checked*)

- 5a. ☐ In accordance with 37 CFR §1.97(e)(1), it is stated that each item of information contained in this Information Disclosure Statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement.
- 5b. ☐ In accordance with 37 CFR §1.97(e)(2), it is stated that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known by any individual designated in §1.56(c) more than three months prior to the filing of this Information Disclosure Statement.
6. ☐ This is a continuation/divisional/continuation-in-part application under 37 CFR §1. 53(b). *(Check appropriate Items 6a and/or 6b and/or 6c).*
- 6a. ☐ Copies of the publications listed on Form PTO-1449 from prior Application Serial No., filed on, of which this application claims priority under 35 USC §120 have been omitted pursuant to 37 CFR §1.98(d) except those listed in 6b. below.
- 6b. ☐ Copies of the following publications listed on Form PTO-1449 which were not previously cited in prior Application Serial No. _____, filed on _____, of which this application claims priority under 35 USC §120, are provided herewith:
- 6c. ☐ Copies of the publications listed in Item 1c. above are listed on Form PTO-1449 but are not included as they were .
7. ☐ This is a continuation/divisional application under 37 CFR §1.53(d). *(Check either Item 7a or 7b.)*
- 7a. ☐ The Issue Fee has not been paid.
- 7b. ☐ A Petition to Withdraw from Issue under 37 CFR §1.313(b)(5) has been granted. A continuation application under 37 CFR §1.53(d) after payment of the Issue Fee is proper in accordance with 37 CFR §1.53(d)(1)(ii).

8. ☐ This is a Supplemental Information Disclosure Statement. (*Check either Item 8a or 8b.*)

8a. ☐ This Supplemental Information Disclosure Statement under 37 CFR §1.97(f) supplements the Information Disclosure Statement filed on_____.

8b. ☐ This Supplemental Information Disclosure Statement is timely filed within one (1) month of the Notice under 37 CFR §1.97(i), mailed _____. (MPEP 609, Form ¶ 6.51, July 1997.)

9. ☐ In accordance with 37 CFR §1.98, a concise explanation of what is presently understood to be the relevance of each non-English language publication is:

(Check appropriate Items 9a, 9b, 9c and/or 9d)

9a. ☐ satisfied because all non-English language publications were cited on the enclosed English language copy of the PCT International Search Report or the search report from a counterpart foreign application indicating the degree of relevance found by the foreign office. (See U.S. Patent and Trademark Office's authorization in the Federal Register, Vol. 57, No. 12, January 17, 1992, at page 2031 (Reply to Comment 68)).

9b. ☐ set forth in the application.

9c. ☐ satisfied because an English language equivalents are attached to each non-English language publication as follows:

9d. ☐ enclosed as Attachment 1(d), hereto.

9e. ☐ attached in abstracts in the English language as follows:

10. ☒ No admission is made that the information cited in this Statement is, or is considered to be, material to patentability nor a representation that a search has been made (other than search report(s) from a counterpart foreign application or a PCT International Search Report, if submitted herewith). 37 CFR §§1.97(g) and (h).

Serial No.: 10/734,022
Filed: December 11, 2003

11. ☒ The Commissioner is authorized to credit any overpayment or charge any additional fee required under 37 CFR §1.17 for this Information Disclosure Statement and/or Petition to Deposit Account No. 50-3309.

The person making this statement is the attorney who signs below on the basis of the information in the attorney's file.

Respectfully submitted:



Attorney for Applicant(s)
Sangya Jain
(Reg. No. 38, 504)
70 Meister Avenue
Somerville, New Jersey 08876
Telephone: (908) 429-3536
Telefax: (908) 429-3650

Customer No. 26,289

CERTIFICATE OF MAILING BY FIRST CLASS MAIL (37 CFR 1.8)Applicant(s): **M. Dalil RAHMAN**

Docket No.

2003US312

Serial No.

10/734,022

Filing Date

December 11, 2003

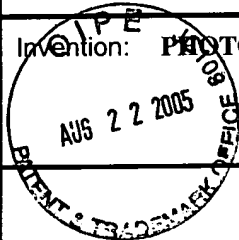
Examiner

THORNTON, Yvette C.

Group Art Unit

1752

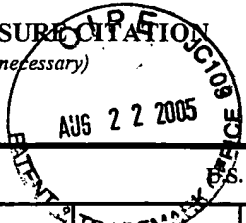
Invention:

PHOTORESIST COMPOSITION FOR DEEP UV AND PROCESS THEREOFI hereby certify that this **Information Disclosure Citation - 2 Pages***(Identify type of correspondence)*


is being deposited with the United States Postal Service as first class mail in an envelope addressed to: The

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August 18, 2005*(Date)***MARIA T. SANCHEZ***(Typed or Printed Name of Person Mailing Correspondence)*
*(Signature of Person Mailing Correspondence)***Note: Each paper must have its own certificate of mailing.**

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>				Docket Number (Optional) 2003US312		Application Number 10/734,022		
				Applicant(s) M. Dalil RAHMAN				
				Filing Date December 11, 2003		Group Art Unit 1752		
U.S. PATENT DOCUMENTS								
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
		4,491,628	6/1/1985	Ito et al.				
		5,350,660	9/27/1994	Urano et al.				
		5,843,624	12/1/1998	Houlihan et al.				
		6,477,980	9/10/2002	Rahman et al.				
		6,274,286	8/14/2001	Hatakeyama et al.				
U.S. PATENT APPLICATION PUBLICATIONS								
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
FOREIGN PATENT DOCUMENTS								
	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		EP 1 215 193 B1	11/17/2004	EUROPE				
OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>								
		Nakano et al., "Adhesion Characteristics of Alicyclic Polymers for use in ArF Excimer Laser Lithography, Proc. SPIE Vol. 3333, pp. 43 - pp. 52 (1998)						
		Wallow et al., "Reactive ion etching of 193 nm resist candidates: current platforms, future requirements", Proc. SPIE Vol. 3333, pp. 92 - pp. 101 (1998)						
EXAMINER				DATE CONSIDERED				
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								

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		Nozaki et al., "Evaluation of alicyclic Methacrylate Resist with a γ -Butyrolactone protective Group for 193-nm Lithography", Journal of Photopolymer Science and Technology, Vol. 11, No. 3, pp. 493 – pp. 498 (1998)			
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Serial No. 10/734,022	Filing Date December 11, 2003	Examiner THORNTON, Yvette C.	Group Art Unit 1752
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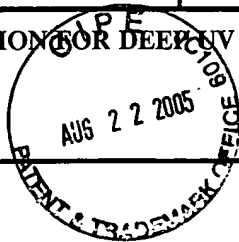
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Nakano et al., "Adhesion Characteristics of Alicyclic Polymers for use in ArF Excimer Laser Lithography, Proc. SPIE Vol. 3333, pp. 43 – pp. 52 (1998) - 10 Pages

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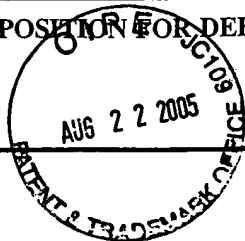
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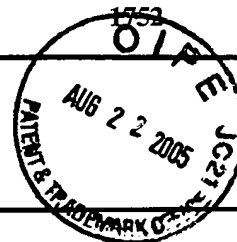
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